

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A base station apparatus, comprising:
a plurality of connectors used for connection to a plurality of antennas respectively;
a plurality of transmission/reception circuits performing transmission/reception using
said plurality of antennas; and

an antenna switching unit provided between said plurality of connectors and said plurality of transmission/reception circuits and modifying a connection relation between said plurality of connectors and said plurality of transmission/reception circuits, to correct an erroneous relationship between said plurality of antennas and said plurality of transmission/reception circuits, wherein said erroneous relationship occurred during installation work of said base station apparatus.

2. (Previously Presented) The base station apparatus according to claim 1, wherein

said plurality of antennas are divided into a plurality of groups, a number of which is equal to a number of said plurality of transmission/reception circuits,

said base station apparatus further comprises a control unit, and

when said antenna switching unit is at an initial state, said control unit obtains properties of said plurality of antennas via said plurality of connectors, determines to which of said plurality of groups each of said plurality of antennas should belong, based on said obtained properties, and causes a state of said antenna switching unit to make a transition from said initial state to a use state suitable for use.

3. (Previously Presented) A base station apparatus comprising:
a plurality of connectors used for connection to a plurality of antennas respectively;
a plurality of transmission/reception circuits performing transmission/reception using
said plurality of antennas; and

an antenna switching unit provided between said plurality of connectors and said plurality of transmission/reception circuits and modifying a connection relation between said plurality of connectors and said plurality of transmission/reception circuits,

wherein:

said plurality of antennas are divided into a plurality of groups, a number of which is equal to a number of said plurality of transmission/reception circuits,

said base station apparatus further comprises a control unit, and

when said antenna switching unit is at an initial state, said control unit obtains properties of said plurality of antennas via said plurality of connectors, determines to which of said plurality of groups each of said plurality of antennas should belong, based on said obtained properties, and causes a state of said antenna switching unit to make a transition from said initial state to a use state suitable for use,

wherein said control unit includes:

a transmission circuit transmitting a test radio wave using one of said plurality of antennas connected to one of said plurality of connectors as a transmission antenna,

a reception circuit receiving said test radio wave using antennas other than said transmission antenna among said plurality of antennas as a reception antenna,

a recording circuit extracting and recording information from reception signals of said test radio waves for each of said plurality of antennas from said reception circuit,

a selection control circuit giving an instruction to said antenna switching unit to sequentially switch a connector to be connected to said transmission circuit among said plurality of connectors, and

a control circuit presuming antenna arrangement from said information recorded on said recording circuit and determining setting for said use state of said antenna switching unit.

4. (Original) The base station apparatus according to claim 2, wherein

said plurality of antennas are connected to a plurality of elements respectively, the plurality of elements having properties different from each other, corresponding to arrangement positions,

said control unit includes

a measurement circuit measuring said properties of each of said plurality of elements via said plurality of connectors, and

a control circuit presuming antenna arrangement based on a measurement result of said measurement circuit and determining setting for said use state of said antenna switching unit.

5. (Original) The base station apparatus according to claim 4, wherein

said plurality of elements are resistance elements.

6. (Previously Presented) The base station apparatus according to claim 2, wherein said plurality of transmission/reception circuits comprises a first transmission/reception circuit and a second transmission/reception circuit,

wherein said antenna switching unit comprises:

a switching portion having N inputs for respectively connecting to said plurality of connectors, said switching portion having N outputs, said plurality of connectors being N in number, N being a positive even integer greater than or equal to four; and

a first connection switch having N internal switches respectively connected at one end to said N outputs of said switching portion, a first subset of said N internal switches being respectively connected at another end to said first transmission/reception circuit and a second subset of said N internal switches being respectively connected at another end to said second transmission/reception circuit, all of said N internal switches being included in either said first subset or said second subset, but not both.

7. (Canceled)

8 (Previously Presented) A base station apparatus, comprising:

a plurality of connectors used for connection to a plurality of antennas respectively;

a plurality of transmission/reception circuits performing transmission/reception using said plurality of antennas;

an antenna switching unit provided between said plurality of connectors and said plurality of transmission/reception circuits and modifying a connection relation between said plurality of connectors and said plurality of transmission/reception circuits, to correct erroneous connections that have occurred during installation work of said base station apparatus;

a test radio transmission circuit for outputting a test radio signal; and

a test radio reception circuit for receiving said test radio signal after said test radio signal has been routed through other components of said base station apparatus,

wherein

said plurality of antennas are divided into a plurality of groups, a number of which is equal to a number of said plurality of transmission/reception circuits,

said base station apparatus further comprises a control unit, and

when said antenna switching unit is at an initial state, said control unit obtains properties of said plurality of antennas via said plurality of connectors, determines to which of said plurality of groups each of said plurality of antennas should belong, based on said obtained properties, and causes a state of said antenna switching unit to make a transition from said initial state to a use state suitable for use,

wherein said plurality of transmission/reception circuits comprises a first transmission/reception circuit and a second transmission/reception circuit,

wherein said antenna switching unit comprises:

a switching portion having N inputs for respectively connecting to said plurality of connectors, said switching portion having N outputs, said plurality of connectors being N in number, N being a positive even integer greater than or equal to four;

a first connection switch having N internal switches respectively connected at one end to said N outputs of said switching portion, a first subset of said N internal switches being respectively connected at another end to said first transmission/reception circuit and a second subset of said N internal switches being respectively connected at another end to said second transmission/reception circuit, all of said N internal switches being included in either said first subset or said second subset, but not both; and

a second connection switch having N internal switches respectively connected at one end to said N outputs of said switching portion, wherein one of said N internal switches of said second connection switch is connected at another end to said test radio transmission circuit and all remaining N-1 of said N internal switches of said second connection switch being connected at another end to said test radio reception circuit.